

REMARKS

In the present Amendment, the preamble of Claim 1 was amended for further clarity by replacing the recitation "A method for designing a mold" with the recitation "A method for obtaining mold design parameters." The preambles of Claims 2-11, which depend from Claim 1, were amended accordingly.

The preamble of Claim 13 is amended for further clarity to recite "A computer readable medium having stored thereon instructions for enabling a computer to execute a process for obtaining a desired injection molding condition."

No new matter was added, and entry of the Amendment is respectfully requested. After entry of the Amendment, Claims 1-14 are pending.

In Paragraph No. 2 of the Office Action, Claims 1-14 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over Claims 1-14 of copending Application No. 10/812,064.

Applicants have submitted herewith a Terminal Disclaimer to obviate the rejection.

In Paragraph No. 3 of the Office Action, Claims 1 and 7-14 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over Claims 1-20 of copending Application No. 10/812,053.

Applicants have submitted herewith a Terminal Disclaimer to obviate the rejection.

In Paragraph 4 of the Office Action, Claims 1-11 and 13 were rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter.

Applicants respectfully traverse the rejection.

With respect to Claims 1-11, Applicants submit that the present claims clearly recite mold design parameters (e.g., numbers and/or positions of gates) that are a useful, tangible and concrete result produced by the recited steps.

With respect to Claim 13, the Examiner asserts that Claim 13 is directed to a “program,” and thus recites no tangible result. In order to advance prosecution, Claim 13 has been amended for clarification purposes to recite “A computer readable medium having stored thereon instructions for enabling a computer to execute a process for obtaining a desired injection molding condition”

In view of the above, Applicants respectfully request reconsideration and withdrawal of the §101 rejection of Claims 1-11 and 13.

In Paragraph No. 6 of the Office Action, Claims 1-14 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 6,096,088 (“Yu”). In Paragraph No. 8 of the Office Action, Claims 1-14 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,816,820 (“Friedl”).

Applicants respectfully traverse the rejections.

Yu and Friedl, alone or in combination, do not disclose or render obvious the invention according to the present claims.

The present claimed invention relates to a method for obtaining mold design parameters, by combination of a numerical analysis method for calculating an injection molding process and a computer-aided optimization method, for the purpose of obtaining a desired injection molding condition. The present claimed invention is also directed to a method for producing an injection molding, a computer readable medium having stored thereon instructions for enabling a computer to execute a process, and an injection molding device

In contrast, Yu and Friedl fail to disclose or suggest “obtaining mold design parameters by combination of a numerical analysis method for calculating an injection molding process and a computer-aided optimization method.”

Therefore, according to the cited references (Yu and Friedl), (1) experience about an injection molding and (2) trial and error are needed to obtain optimized parameters. Further, when the number of gates becomes very large, it becomes difficult to obtain optimized parameters.

On the other hand, the present claimed invention is a method for obtaining mold design parameters by combination of a numerical analysis method for calculating an injection molding process and a computer-aided optimization method. Therefore, by the present claimed invention, neither (1) experience about an injection molding nor (2) trial and error are needed to obtain optimized parameters. Moreover, even if the number of gates becomes very large, it is not difficult to obtain optimized parameters.

In view of the above, Applicants respectfully request reconsideration and withdrawal of the §102 rejections of Claims 1-14 based on Yu and Friedl.

In Paragraph No. 11 of the Office Action, Claims 1-14 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over either Yu or Friedl in view of U.S. Patent No. 6,454,973 (“Norton”).

Applicants respectfully traverse the rejection.

Yu, Friedl and Norton, alone or in combination, do not disclose or render obvious the present claimed invention.

With respect to Norton, the Examiner asserts that Norton suggests that a mold clamping force can be controlled by optimizing the control of the flow of plastic material into a mold

AMENDMENT UNDER 37 C.F.R. § 1.111
Application No.: 10/812,052

Attorney Docket No.: Q80742

cavity. However, Norton is only directed to opening and closing a single gate. See, e.g., Norton's Abstract. Thus, Applicants submit that Norton does not disclose or suggest a method of controlling the time-sequence of the opening and closing of a plurality of inflow regulation valves.

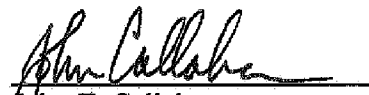
In view of the above, Applicants respectfully request reconsideration and withdrawal of the §103 rejection of Claims 1-14 based on Yu, Friedl and Norton.

Allowance of Claims 1-14 is respectfully requested.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


John T. Callahan
Registration No. 32,607

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: July 5, 2007